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VIA ELECTRONIC MAIL

January 31, 2020

John Hopkins
Remedial Project Manager
Land and Chemicals Division
USEPA Region III
1650 Arch Street (3LC10)
Philadelphia, PA 19103

**Subject: Semi-Annual Project Progress Report: July – December 2019
RCRA Corrective Action Permit MDD046279311
Former Appliance Park East Facility
Columbia, Maryland**

Dear Mr. Hopkins:

Please find attached the Semi-Annual Project Progress Report for the former Appliance Park East facility in Columbia, Maryland. This report covers the period from July 1 to December 31, 2019 and is submitted by the General Electric Company (GE) pursuant to Condition II.C of the above-referenced permit, as modified by the United States Environmental Protection Agency (EPA).

As required by Condition I.B.9 of the above-referenced permit, I certify under penalty of law that the enclosed report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please contact me or Belssi Chang Lee of Tetra Tech at (410) 990-4607 if you have any questions regarding the attached report.

Sincerely,

Kevin Mooney
Senior Project Manager
GE Global Operations - Environment, Health & Safety

Attachment

cc: Belssi Chang Lee, Tetra Tech (via email)
Ed Hammerberg, MDE (via email)
Curt Lebak, RREEF (via email)
Bill Rowe, Howard Hughes Corporation (via email)

SEMI-ANNUAL PROJECT PROGRESS REPORT

RCRA CORRECTIVE ACTION PERMIT (PERMIT)

Permittee: General Electric Company (GE)

Permit Number: MDD046279311

Prepared for GE Global Operations – Environmental Remediation
1 Plastics Avenue
Pittsfield, Massachusetts 01201

Prepared By: Tetra Tech, Inc. (Tetra Tech)
980 Awald Road, Suite 302
Annapolis, Maryland 21403

Date: January 28, 2020

Report Period: July 1, 2019 to December 31, 2019

Copies: Maryland Department of the Environment (MDE)
RREEF Engineering
The Howard Hughes Corporation

1. Progress Made This Period

Volatile Organic Compounds (VOCs) in Soil and Groundwater Beneath and Around the Former Manufacturing Building - RCRA Facility Investigation (RFI) Unit 2

The Parcel A-10 pump-and-treat system was operational over the last six months except as noted in the monthly monitoring reports submitted to the United States Environmental Protection Agency (EPA) for this reporting period (i.e., July through December 2019). Attachment 1 includes summary tables and figures showing the site plan and performance monitoring results for the pump-and-treat system.

A groundwater monitoring event was conducted in November 2019 in accordance with the approved SAP dated May 4, 2011; the report (Tetra Tech, 2020) was previously submitted to EPA. Attachment 1 includes a summary of the results including groundwater elevation data, groundwater elevation contour maps for the saprolite and bedrock units, and summary of analytical results. The groundwater samples were collected using passive diffusion bags (PDBs). Tetra Tech deployed the (PDBs) on November 8, 2019 and retrieved them on November 22, 2019 to collect the groundwater samples. The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260. The groundwater analytical results are

summarized in Table 2; historical TCE analytical results are presented in Table 3. The highest trichloroethene (TCE) concentration detected during the November 2019 sampling event was 116,000 µg/L in the sample collected from monitoring well 2TP-10. This concentration is higher than the 107,000 µg/L TCE concentration measured during the previous sampling event (May 2019). As observed in Table 3 concentrations at 2TP-10 appear to have been increasing since 2017; the reason is unclear. Groundwater elevations at 2TP-10 and concentrations at the nearest/deeper well 2TP-11 have remained relatively stable for the past several years. The next sampling event will be in May 2020; further steps will be determined after review of the 2TP-10 results.

Figures 9 and 10 illustrate the change in TCE concentrations since June 2000 at wells located within the plume core and at wells located at the plume toe and cross-gradient of the plume, respectivelyⁱ. The groundwater elevation and sample results from the November 2019 sampling event show that the hydraulic containment system continues to operate as intended. Specifically, VOC-impacted groundwater continues to be contained on Parcel A-10.

Warehouse Building Oil/Water Separator and Acid Neutralization Units - RFI Unit 6

The most recent 5-year monitoring event under the EPA-approved August 19, 2002 SAP was performed on November 17, 2017 (the prior 5-year monitoring event was conducted on November 29, 2012). Groundwater samples were collected from monitoring wells 6MW-1, 6MW-2, 6MW-3, and OBG-65. The groundwater monitoring results were presented in the report submitted to EPA on December 11, 2017 (Tetra Tech, 2017). Attachment 2 includes a summary of the groundwater monitoring results including groundwater levels and the respective groundwater elevations (Table 1) and summary of analytical results (Table 2). VOCs were not detected in any of the groundwater samples except for 6MW-2, which is located at the former oil/water separator under the building. The groundwater elevation data and sample results show that the extent of VOC-affected groundwater remains within the footprint of the Warehouse Building.

Other Activities Conducted Pursuant to the Permit

The current RCRA Corrective Action Permit was issued by EPA for the facility with an effective date of November 3, 2012. In accordance with Part II.B.3 of the Permit, GE submitted an Institutional Control Plan (IC Plan) dated January 24, 2013 to EPA. By its email to GE, EPA approved the IC Plan on February 5, 2013. EPA approved the environmental covenants (ECs) for each of the properties subject to the IC Plan previously; however, following submittal of the signed ECs for parcels A-8, A-10 and A-15, MDE and EPA requested that the EC template be revised. An EC has been executed and recorded for Parcel A-8; in accordance with the IC Plan,

ⁱ Abnormalities in the trends shown on Figure 9 (2MW-11) and Figure 10 (S-2, S-4, 2MW-4) are due to non-detect results, which are considered to be anomalous based on the analytical results from subsequent sampling events.

the Annual Institutional Control Monitoring Report is in Attachment 3. GE is in communication with EPA regarding the ECs for the remaining parcels.

2. *Problems Encountered During This Period*

No problems were encountered during this period.

3. *Projected Work for the Next Reporting Period*

VOCs in Soil and Groundwater Beneath and Around the Former Manufacturing Building - RFI Unit 2

The Parcel A-10 pump-and-treat system is expected to operate at full-scale through the next reporting period, with the exception of the operation of recovery well B-3 (which will be sampled again in June 2020 to monitor for rebound in VOC concentrations). The next groundwater monitoring event will be conducted in May 2020 in accordance with the SAP. Groundwater monitoring will include the monitoring wells on a semi-annual, annual, and biennial sampling frequency.

Warehouse Building Oil/Water Separator and Acid Neutralization Units - RFI Unit 6

The next monitoring event is scheduled for October/November 2022.

Other Activities to Be Conducted Pursuant to the Permit

As stated previously, GE is continuing work towards finalizing the ECs for each of the properties subject to the IC Plan. Once the ECs have been executed by all appropriate parties, the ECs will be recorded with the Howard County Land Records.

4. *Changes in Personnel*

There were no changes in personnel during this reporting period.

References

Tetra Tech, Inc. (Tetra Tech) 2017. *RFI Unit 6 Groundwater Monitoring Report, November 17 Sampling Event, RCRA Corrective Action Permit MDD046279311, Former Appliance Park East Facility, Columbia, Maryland.* December 11, 2017.

Tetra Tech, 2020. *Semi-Annual Groundwater Monitoring Report, November 2019 Sampling Event, RCRA Corrective Action Permit MDD046279311, CMS Units 2 and 7, Former Appliance Park East Facility, Columbia, Maryland.* January 6, 2020.

Attachments

Attachment 1: Findings Summary for Groundwater for RFI Units 2 and 7

Attachment 2: Findings Summary for Warehouse Building Oil/Water Separator and
Acid Neutralization Units RFI Unit 6

Attachment 3: Annual Institutional Control Monitoring Plan

ATTACHMENT 1

To Semi-Annual Project Progress Report
RCRA Corrective Action Permit
No. MDD046279311

General Electric Co.
Former Appliance Park East Facility
Columbia, MD

Period July 1, 2019 to December 31, 2019

Findings Summary for Groundwater for RFI Units 2 and 7

FIGURE 1
PARCEL A-10 GROUNDWATER PUMP AND TREAT SYSTEM WELLS
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND

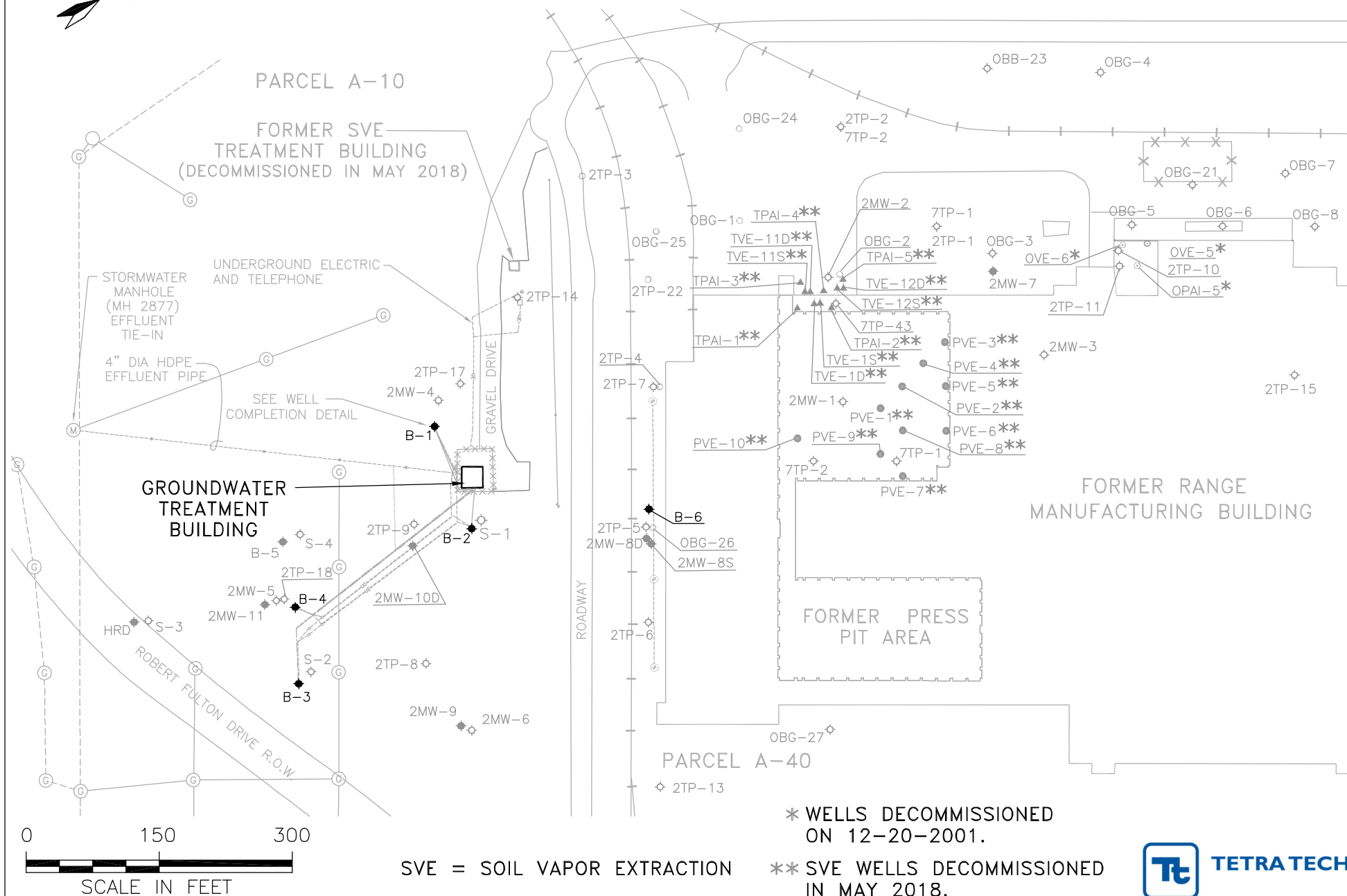


Figure 2
Groundwater Pump-and-Treat System Recovery
Former Appliance Park East Facility, Columbia, Maryland

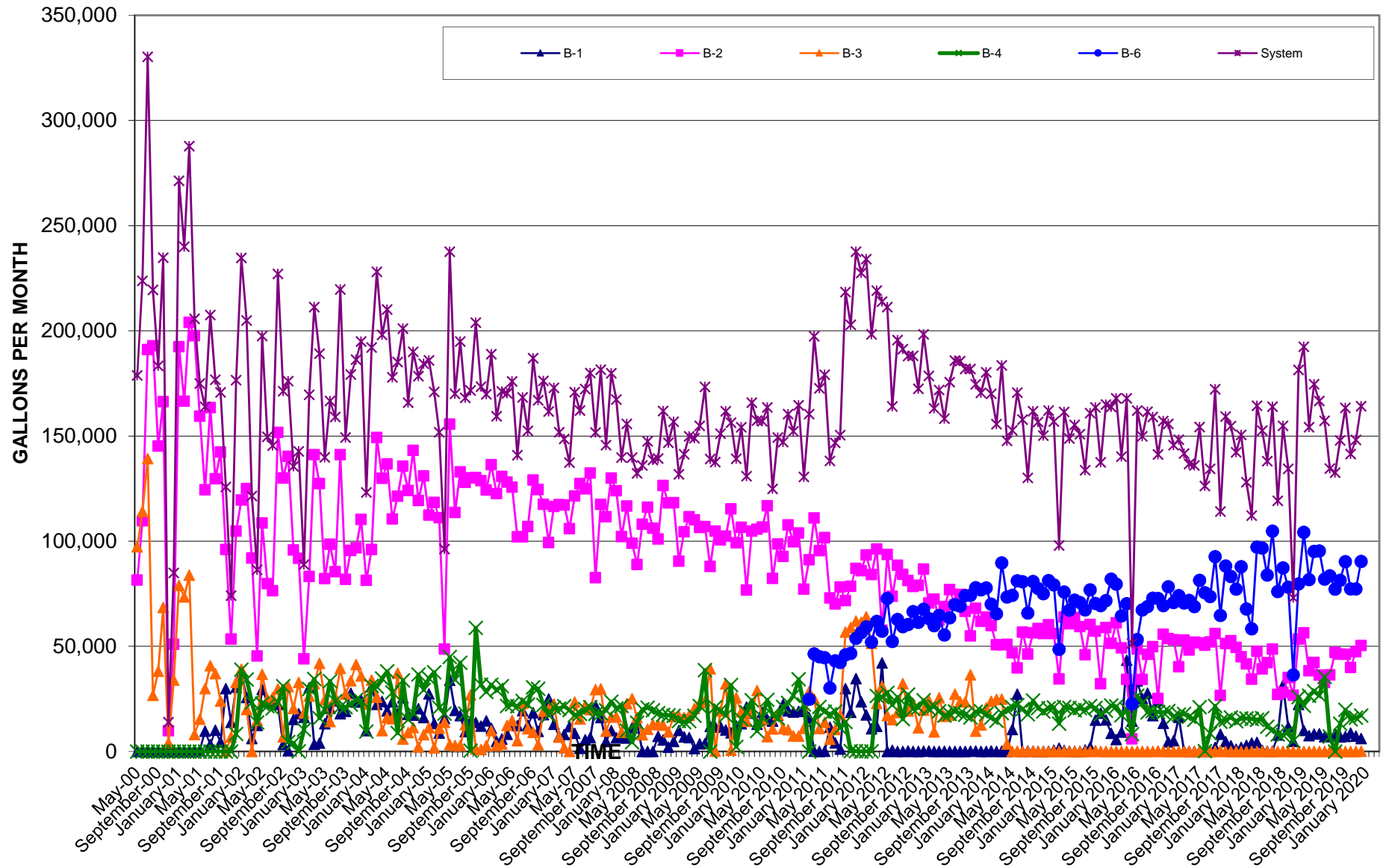


Figure 3
Groundwater Pump-and-Treat System Recovery - Trailing 12-Month Total Gallons
Former Appliance Park East Facility, Columbia, Maryland

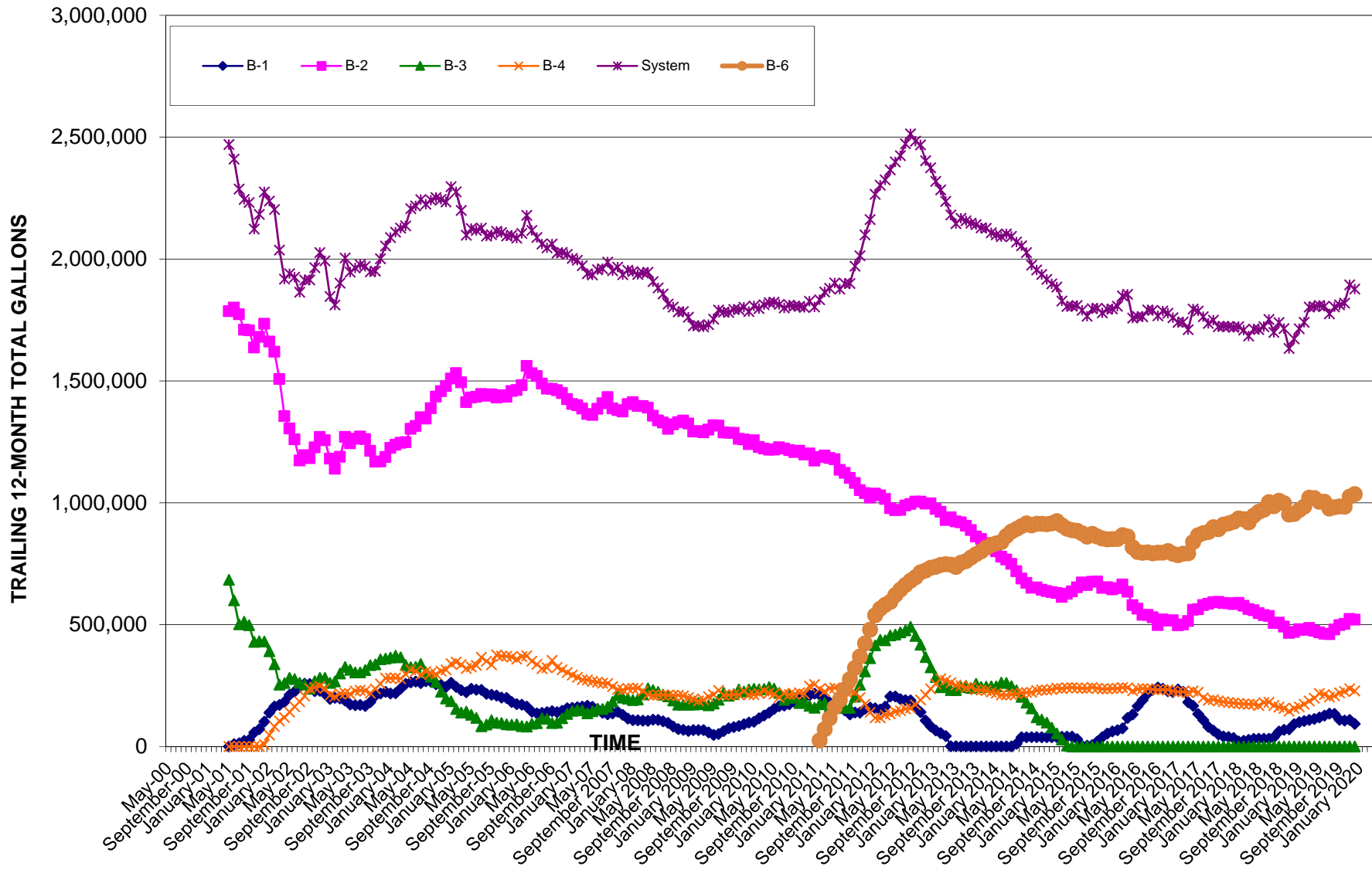
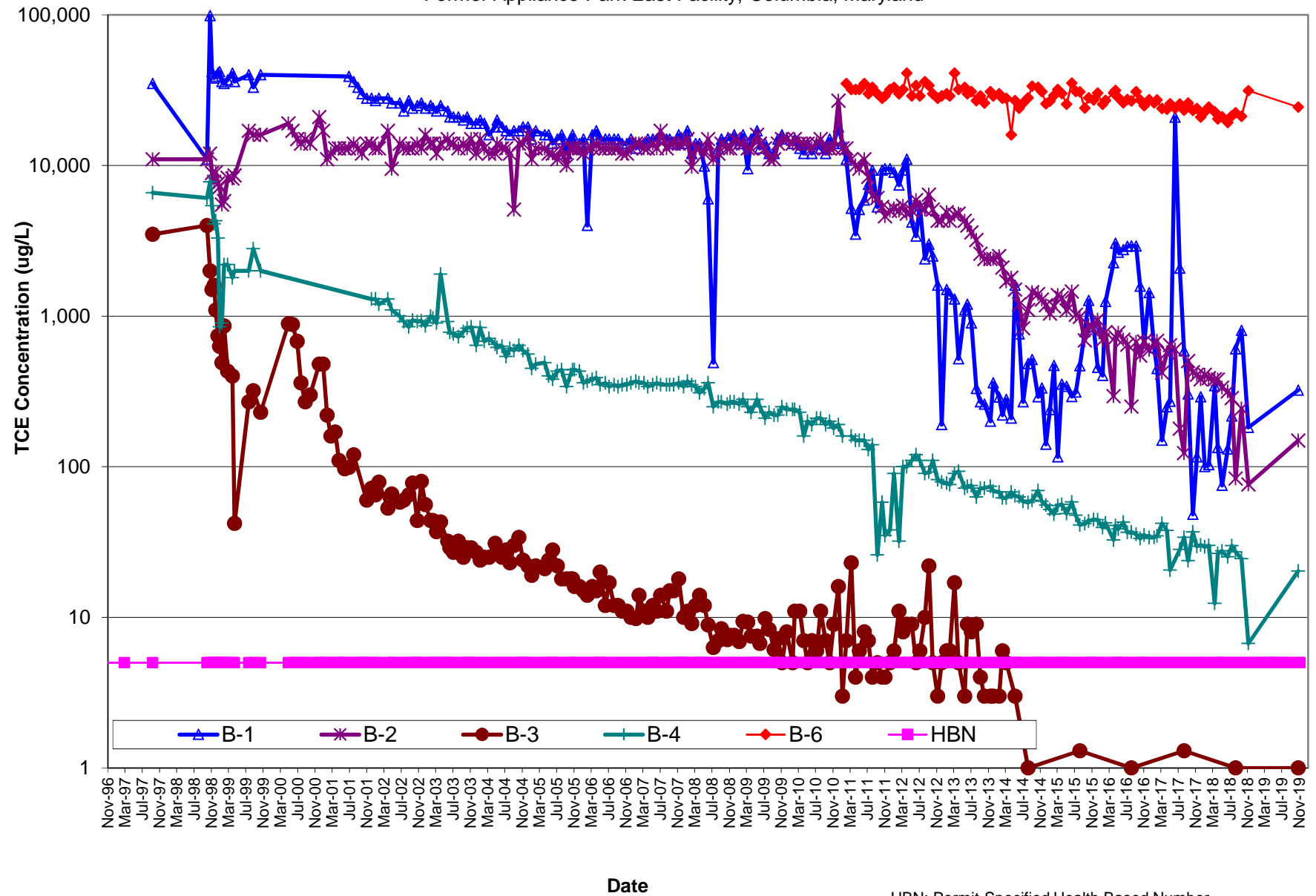


Figure 4
TCE Concentrations in Groundwater Recovery Wells
 Former Appliance Park East Facility, Columbia, Maryland



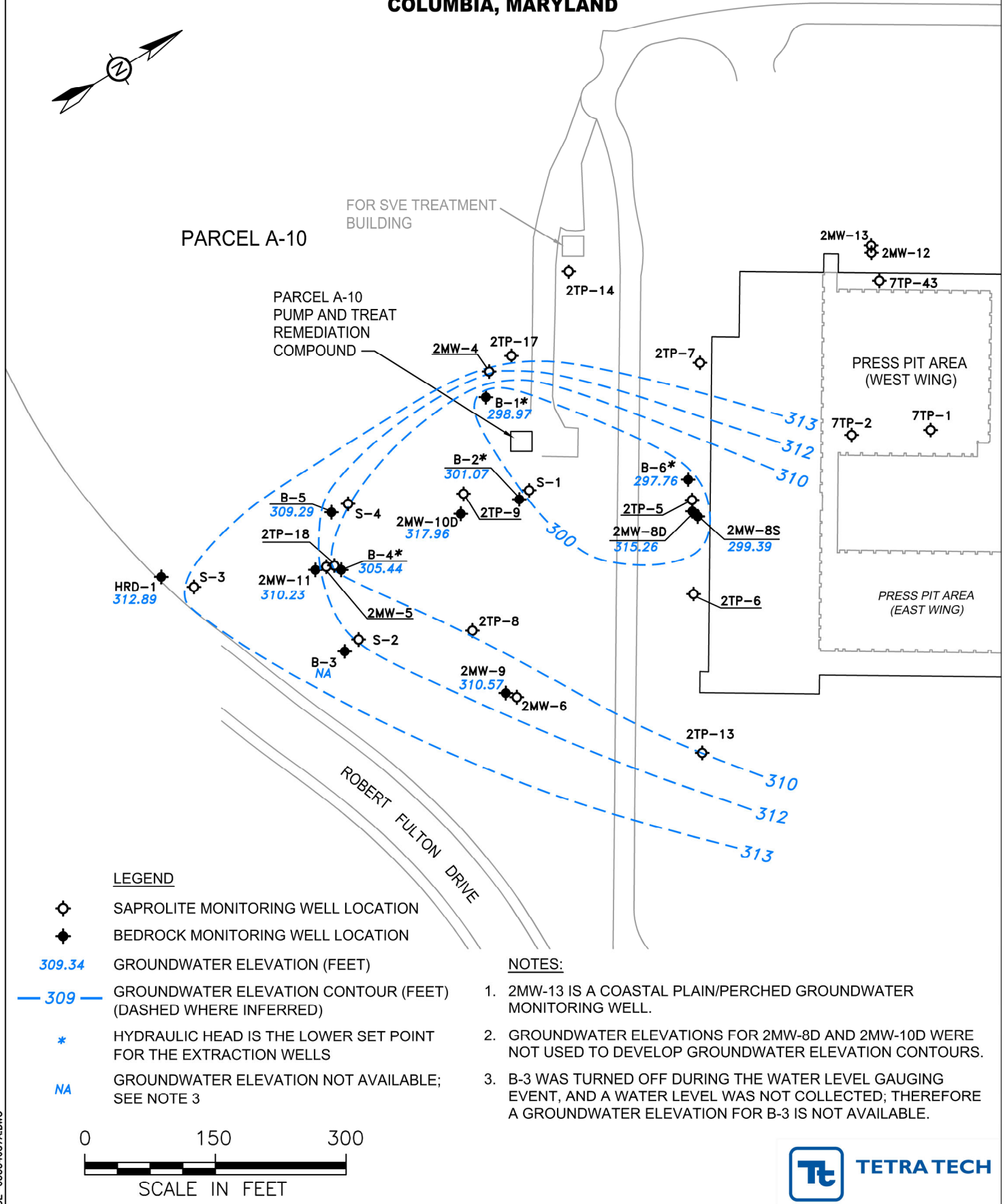
HBN: Permit-Specified Health Based Number

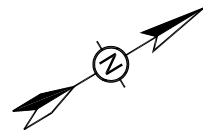


- NOTES:

-

FIGURE 7
HYDRAULIC HEADS FOR PARCEL A-10 BEDROCK WELLS
NOVEMBER 8, 2019
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND





Parcel A-43

FIGURE 8
APPROXIMATE EXTENT OF TCE IN GROUND WATER FROM
NOVEMBER 2019 SAMPLING EVENT
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND

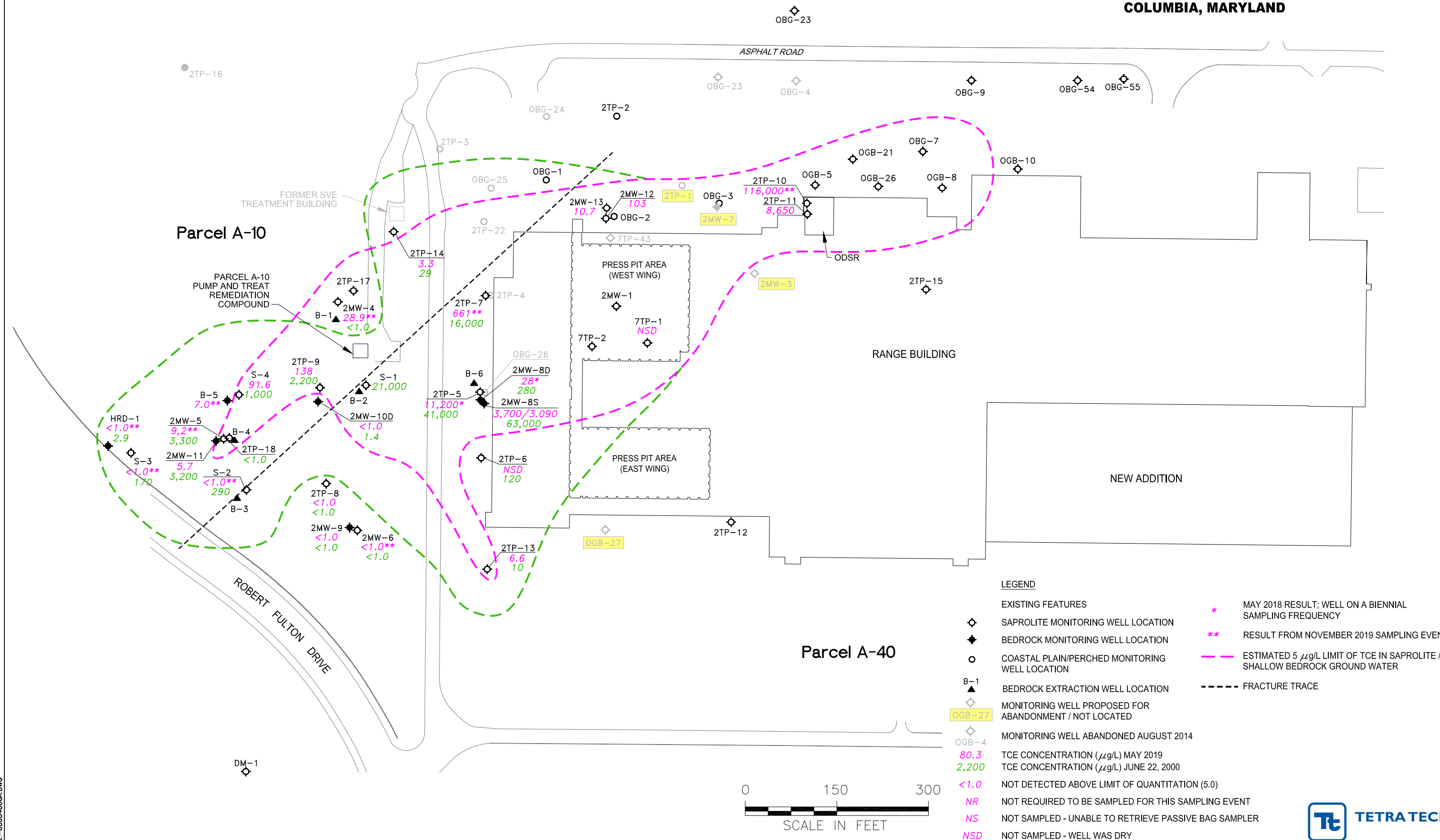


Figure 9
TCE Concentrations within Plume Core
Former Appliance Park East Facility
Columbia, Maryland

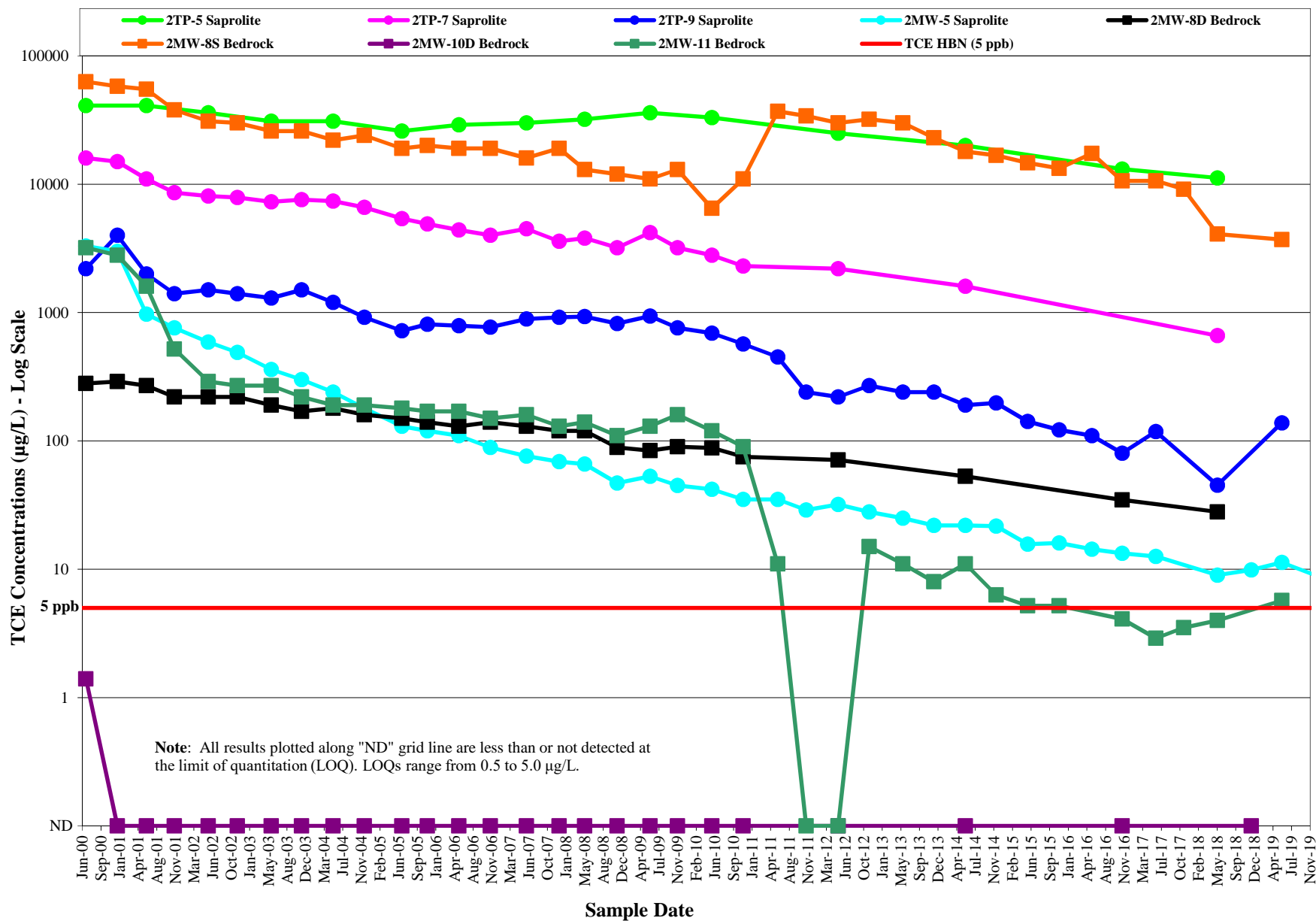


Figure 10
TCE Concentrations at Plume Toe and Cross-Gradient
Former Appliance Park East Facility
Columbia, Maryland

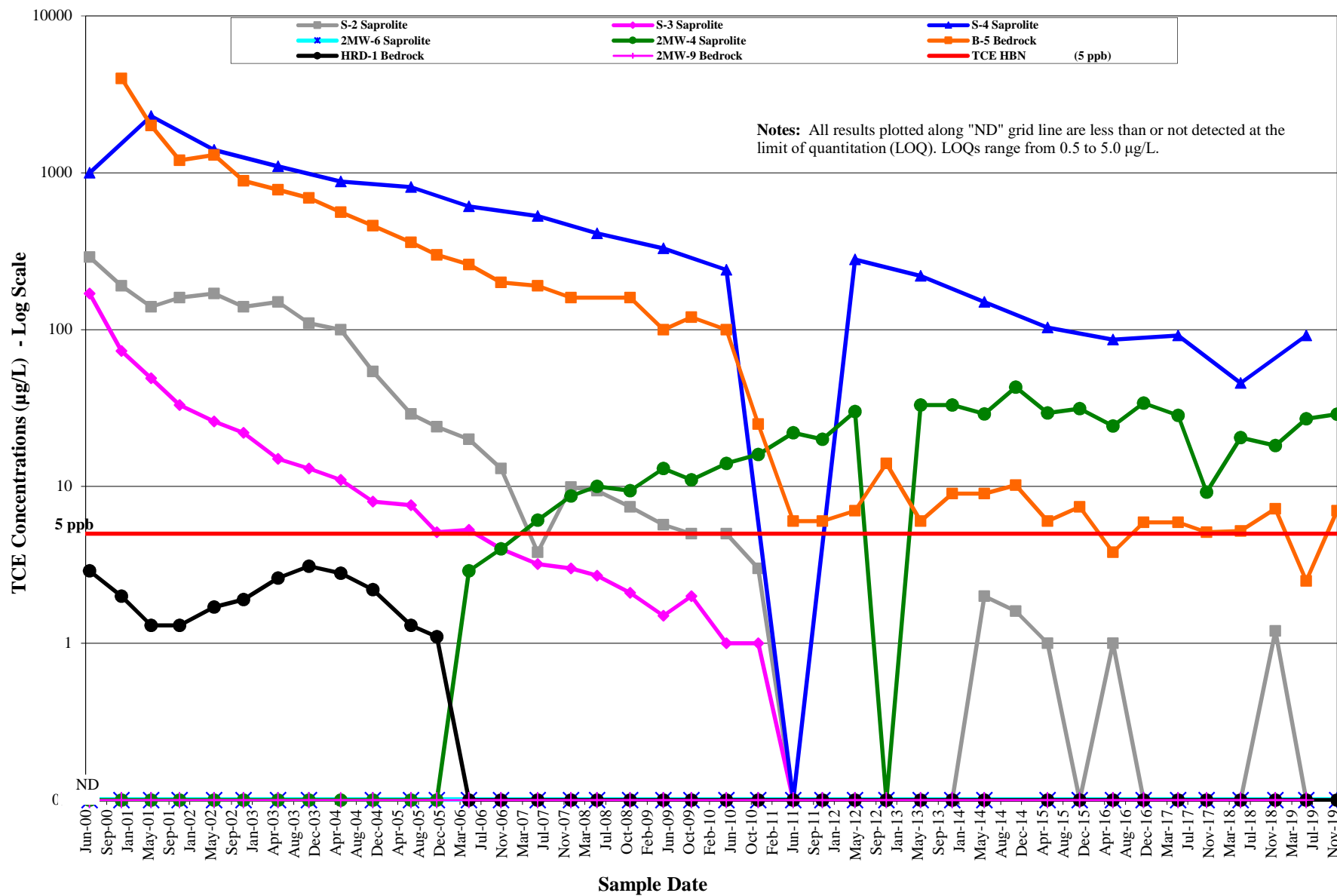


TABLE 1
Groundwater Elevations for Monitoring Wells at CMS Units 2 and 7
November 8, 2019
Former Appliance Park East Facility, Columbia, Maryland

Well ID	Interpreted Lithology	Reference Point Elevation (ft > MSL)	Well Depth (ft BGS)	Well Screen Length (ft)	Well Screen Top (ft BGS)	Well Screen Bottom (ft BGS)	Screen Top Elevation (ft > MSL)	Screen Bottom Elevation (ft > MSL)	Sampling Frequency**	Water Level Monitoring Frequency	Depth to Water on November 8, 2019 (ft BRE)	Groundwater Elevation on November 8, 2019 (ft > MSL)
SAPROLITE / WATER TABLE												
7TP-1	Saprolite	345.76	24	20	4	24	342	322	Annually	Semi-Annually	DRY	DRY
2TP-5	Saprolite	358.02	63	15	48	63	308.38	293.38	Biennially	Semi-Annually	58.78	299.24
2TP-6	Saprolite	358.79	50	15	35	50	321.41	306.41	Annually	Semi-Annually	DRY	DRY
2TP-7	Saprolite	358.76	59	15	44	59	313.16	298.16	Biennially	Semi-Annually	41.84	316.92
2TP-8	Saprolite	348.67	62	15	47	62	299.11	284.11	Annually	Semi-Annually	39.05	309.62
2TP-9	Saprolite	348.85	55	15	40	55	305.95	290.95	Annually*	Semi-Annually	41.40	307.45
2TP-10	Coastal Plain & Saprolite	358.95	23	10	13	23	345	335	Annually	Semi-Annually	17.93	341.02
2TP-11	Coastal Plain & Saprolite	357.57	30	10	20	30	338	328	Annually	Semi-Annually	18.22	339.35
2TP-13	Saprolite	362.11	59	15	44	59	315.58	300.58	Annually	Semi-Annually	56.12	305.99
2TP-14	Saprolite	348.85	48	15	33	48	314.77	299.77	Annually	Semi-Annually	27.93	320.92
2TP-17	Saprolite	349.29	47	15	32	47	314.8	299.8	None	Semi-Annually	36.32	312.97
2TP-18	Saprolite	346.42	43	15	28	43	316.02	301.02	None	Semi-Annually	37.09	309.33
2MW-4	Saprolite	348.8	46	20	26	46	320.31	300.31	Semi-Annually	Semi-Annually	36.71	312.09
2MW-5	Saprolite	346.06	68	15	53	68	290.87	275.87	Semi-Annually	Semi-Annually	36.98	309.08
2MW-6	Saprolite	350.13	44	15	29	44	318.6	303.6	Semi-Annually	Semi-Annually	40.14	309.99
2MW-12	Saprolite	353.61	36	15.0	21.0	36.0	332.57	317.57	Annually	Semi-Annually	29.35	324.26
2MW-13	Coastal Plain/Perched	353.42	11	8	3	11	350.69	342.69	Annually	Semi-Annually	3.41	350.01
S-1	Saprolite	349.94	41	30	11	41	336.9	306.9	None	Semi-Annually	DRY	DRY
S-2	Saprolite	346.89	50	30	20	50	325.06	295.06	Semi-Annually	Semi-Annually	36.98	309.91
S-3	Saprolite	347.69	50	30	20	50	325.78	295.78	Semi-Annually	Semi-Annually	35.87	311.82
S-4	Saprolite	346.14	50	30	19	49	325.23	295.23	Annually	Semi-Annually	36.76	309.38
BEDROCK												
2MW-8S	Bedrock	359.24	128	20	108	128	248.8	228.8	Annually*	Semi-Annually	59.85	299.39
2MW-9	Bedrock	349.45	93	20	73	93	274.47	254.47	Annually*	Semi-Annually	38.88	310.57
2MW-11	Bedrock	345.54	120	20	100	120	243.61	223.61	Annually*	Semi-Annually	35.31	310.23
2MW-8D	Bedrock	359.09	208	15	193	208	163.43	148.43	Biennially	Semi-Annually	43.83	315.26
2MW-10D	Bedrock	348.56	200	24	176	200	170.08	146.08	Biennially	Semi-Annually	30.60	317.96
HRD-1	Bedrock	341.11	140	20	120	140	221.11	201.11	Semi-Annually	Semi-Annually	28.22	312.89
B-5	Bedrock	345.99	140	86	54	140	290.08	204.08	Semi-Annually	Semi-Annually	36.70	309.29

NOTES:

BGS = below ground surface

BRE = below reference elevation

ft = feet

> MSL = above mean sea level

* Well sampled on an annual basis starting November 2018 per October 29, 2018 EPA approval.

** Semi-annual frequency: May/June and November/December. Annual frequency: May/June. Biennial sampling: May/June of even years starting in 2012.

The low set points for the pump-and-treat system recovery (extraction) wells are: B-1: 298.97 ft MSL; B-2: 301.07 ft MSL; B-3: 306.43 ft MSL; B-4: 301.37 ft MSL; and B-6: 297.00 ft MSL.

TABLE 2
VOC Detections for CMS Units 2 and 7 Groundwater Monitoring
November 22, 2019
Former Appliance Park East Facility, Columbia, Maryland

Well - Sample ID	Trichloroethene (ug/L)	Cis-1,2-dichloroethene (ug/L)	Trans-1,2-dichloroethene (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Chloroform (ug/L)	1,1,2-Trichloroethane (ug/L)	Vinyl Chloride (ug/L)
Saprolite / Water Table									
7TP-1	NSD	NSD	NSD	NSD	NSD	NSD	NSD	NSD	NSD
2TP-5*	NR	NR	NR	NR	NR	NR	NR	NR	NR
2TP-6	NSD	NSD	NSD	NSD	NSD	NSD	NSD	NSD	NSD
2TP-7*	NR	NR	NR	NR	NR	NR	NR	NR	NR
2TP-8	NR	NR	NR	NR	NR	NR	NR	NR	NR
2TP-9	NR	NR	NR	NR	NR	NR	NR	NR	NR
2TP-10 ^{CS}	116,000	77.9	7.1	2.2	5.3	66.7	11.6	28	<1.0
2TP-11 ^{CS}	NR	NR	NR	NR	NR	NR	NR	NR	NR
2TP-13	NR	NR	NR	NR	NR	NR	NR	NR	NR
2TP-14	NR	NR	NR	NR	NR	NR	NR	NR	NR
2MW-4	28.9	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-5	9.2	4.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-12	NR	NR	NR	NR	NR	NR	NR	NR	NR
2MW-13 ^{CP}	NR	NR	NR	NR	NR	NR	NR	NR	NR
S-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
S-3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
S-4	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bedrock									
2MW-8S	NR	NR	NR	NR	NR	NR	NR	NR	NR
2MW-9	NR	NR	NR	NR	NR	NR	NR	NR	NR
2MW-11	NR	NR	NR	NR	NR	NR	NR	NR	NR
2MW-8D*	NR	NR	NR	NR	NR	NR	NR	NR	NR
2MW-10D*	NR	NR	NR	NR	NR	NR	NR	NR	NR
HRD-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
B-5	7.0	18.9	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Field Blank	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

NOTES:

ug/L = Micrograms per liter

/ = Duplicate samples

NR = well not sampled - not required for this sampling event

NS = Not sampled - unable to retrieve passive bag sampler

NSD = Not sampled due to well being dry or had insufficient volume of water

MW-12, MW-13, 2TP-10, and 2TP-11 added to semi-annual sampling in June 2011

Starting in November 2009 samples analyzed using EPA Method 8260

< = result is less than or not detected at this limit of quantitation

^{CS} Coastal Plain & Saprolite

^{CP} Coastal Plain/Perched Well

* Well on a biennial sampling frequency.

TABLE 3
Historical TCE Analytical Results for CMS Units 2 and 7 Groundwater Monitoring
Former Appliance Park East Facility, Columbia, Maryland

Well - Sample ID	Well Depth (ft BGS)	Well Screen (ft BGS)		5/16/2008	11/20/2008	5/29/2009	11/3/2009	5/21/2010	11/19/2010	6/6/2011	11/18/2011	5/21/2012	11/16/2012	5/30/2013	11/25/2013
		Top (ft BGS)	Bottom (ft BGS)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)
Saprolite / Water Table															
7TP-1	24	4.0	24.0	NC	NC	NC	NC	NC	NC	NSD	NR	NSD	NR	NSD	NR
2TP-5*	63.0	48.0	63.0	32,000	NR	36,000	NR	33,000	NR	NR	NR	25,000	NR	NR	NR
2TP-6	50.0	35.0	50.0	NSD	NSD	NSD	NSD	NSD	<1.0	NSD	NR	NSD	NR	NSD	NR
2TP-7*	59.0	44.0	59.0	3,800	3,200	4,200	3,200	2,800	2,300	NR	NR	2,200	NR	NR	NR
2TP-8	62.0	47.0	62.0	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	NR	<5.0	NR	<5.0	NR
2TP-9	55.0	40.0	55.0	930	820	940	760	690	570	450	240	220	270	240	240
2TP-10 ^{CS}	21.9	13.0	23.0	NC	NC	NC	NC	NC	NC	68,000	NR	58,000	NR	53,000	NR
2TP-11 ^{CS}	30.0	19.2	30.0	NC	NC	NC	NC	NC	NC	5,400	NR	7,800	NR	6,400	NR
2TP-13	59.0	44.0	59.0	<2.0	0.7	0.5	<1.0	<1.0	<1.0	7.0	NR	10	NR	10	NR
2TP-14	58.0	43.0	58.0	4.4	3.6	3.1	2.0 J	3.0 J	4.0 J	<5.0	NR	<5.0	NR	<5.0	NR
2MW-4	46.0	26.0	46.0	10.0	9.4	13	11	14	16	22	20	30	<5.0	33	33
2MW-5	68.0	53.0	68.0	66	47	53	45	42	35	35	29	32	28	25	22
2MW-6	44.0	29.0	44.0	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2MW-12	34.9	19.9	34.9	NC	NC	NC	NC	NC	NC	1,900	NR	2,000	NR	1,200	NR
2MW-13 ^{CP}	11.0	3.0	11.0	NC	NC	NC	NC	NC	NC	21	NR	9.0	NR	13	NR
S-2	50.0	20.0	50.0	9.4	7.4	5.7	5.0 J	5.0 J	3.0 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
S-3	50.0	20.0	50.0	2.7	2.1	1.5	2.0 J	1.0 J	1.0 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
S-4	50.0	20.0	50.0	410	NR	330	NR	240	NR	<5.0	NR	280	NR	220	NR
Bedrock															
2MW-8S	128.0	108.0	128.0	13,000	12,000	11,000	13,000	6,500	11,000	37,000	34,000 / 33,000	29,000 / 30,000	30,000 / 32,000	28,000 / 30,000	23,000 / 23,000
2MW-9	93.0	73.0	93.0	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2MW-11	120.0	100.0	120.0	140	110	130	160	120	90	11	<5.0	<5.0	15	11	8
2MW-8D*	208.0	193.0	208.0	120	89	84	90	88	75	NR	NR	71	NR	NR	NR
2MW-10D*	200.0	176.0	200.0	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	NR	NR	<5.0	NR	NR	NR
HRD-1	140.0	120.0	140.0	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
B-5	140.0	54.0	140.0	NS	160 E	100	120	100	25	6	6	7	14	6	9
Field Blank	-	-	-	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

NOTES:

ug/L = Micrograms per liter

BGS = Below ground surface

^{CS} Costal Plain & Saprolite

^{CP} Coastal Plain/Perched Well

/ = Duplicate samples

TCE = Trichloroethene

NC = Not collected

NA = Not available

NR = Not required for this sampling event

NS = Not sampled - unable to retrieve passive bag sampler

NSD = Not sampled due to insufficient volume of water in well

< = result is less than or not detected at this limit of quantitation

MW-12, MW-13, 2TP-10, and 2TP-11 added to semi-annual sampling in June 2011

Starting in November 2009 samples analyzed using EPA Method 8260

* Well on biennial sampling frequency

Table presents concentrations from May 2008 to the present

** Well on annual sampling frequency per October 29, 2018 EPA approval.

TABLE 3
Historical TCE Analytical Results for CMS Units 2 and 7 Groundwater Monitoring
Former Appliance Park East Facility, Columbia, Maryland

Well - Sample ID	Well Depth (ft BGS)	Well Screen (ft BGS)		5/27/2014	11/21/2014	5/22/2015	11/20/2015	5/27/2016	11/18/2016	6/2/2017	11/10/2017	5/23/2018	12/6/2018	5/31/2019	11/22/2019
		Top (ft BGS)	Bottom (ft BGS)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)	TCE (µg/L)
Saprolite / Water Table															
7TP-1	24	4.0	24.0	NSD	NR	NSD	NR	NR	NR	Not sampled - well was dry	Not sampled - well was dry	Not sampled - well was dry	Not sampled - well was dry	Not sampled - well was dry	Not sampled - well was dry
2TP-5*	63.0	48.0	63.0	20,000	NR	NR	NR	NR	13,100	NR	NR	11,200	NR	NR	NR
2TP-6	50.0	35.0	50.0	NSD	NR	<1.0	NR	NR	NR	1.2	NR	Not sampled - well was dry	NR	NS	Not sampled - well was dry
2TP-7*	59.0	44.0	59.0	1,600	NR	NR	NR	NR	956	NR	NR	661	NR	NR	NR
2TP-8	62.0	47.0	62.0	<5.0	NR	<1.0	NR	NR	NR	<1.0	NR	<1.0	NR	<1.0	NR
2TP-9	55.0	40.0	55.0	190	198	142	122	122	80.3	118	83.8	45.2	NR**	138	NR
2TP-10 ^{CS}	21.9	13.0	23.0	54,000	NR	55,300	NR	NR	NR	78,500	NR	72,700	NR	107,000	116,000
2TP-11 ^{CS}	30.0	19.2	30.0	7,000	NR	7,240	NR	NR	NR	8,320	NR	6,970	NR	8,650	NR
2TP-13	59.0	44.0	59.0	9.0	NR	8.9	NR	NR	NR	8.1	NR	6.0	NR	6.6	NR
2TP-14	58.0	43.0	58.0	<5.0	NR	5.7	NR	NR	NR	3.1	NR	2.6	NR	3.3	NR
2MW-4	46.0	26.0	46.0	29	33	29.4	31.3	31.3	34	28.4	22.8	20.5	18.2	27	28.9
2MW-5	68.0	53.0	68.0	22	21.7	15.7	16	16	13.3	12.6	10.7	9.0	9.9	11.3	9.2
2MW-6	44.0	29.0	44.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-12	34.9	19.9	34.9	1,000	NR	292	NR	NR	NR	219	NR	184	NR	103	NR
2MW-13 ^{CP}	11.0	3.0	11.0	11	NR	11.8	NR	NR	NR	10	NR	7.5	NR	10.7	NR
S-2	50.0	20.0	50.0	<5.0	1.6	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0
S-3	50.0	20.0	50.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
S-4	50.0	20.0	50.0	150	NR	103	NR	NR	NR	91.7	NR	45.7	NR	91.6	NR
Bedrock															
2MW-8S	128.0	108.0	128.0	18,000 / 18,000	14,700 / 16,800	14,700 / 13,600	13,300 / 13,300	13,300 / 13,300	10,600 / 11,500	10,600 / 9,160	9,150 / 8,040	4,090 / 4,040	NR**	3,700 / 3,090	NR
2MW-9	93.0	73.0	93.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NR**	<1.0	NR
2MW-11	120.0	100.0	120.0	11	6.3	5.2	5.2	5.2	4.1	2.9	3.5	4.0	NR**	5.7	NR
2MW-8D*	208.0	193.0	208.0	53	NR	NR	NR	NR	34.7	NR	NR	28	NR	NR	NR
2MW-10D*	200.0	176.0	200.0	<5.0	NR	NR	NR	NR	<1.0	NR	NR	NS	<1.0	NR	NR
HRD-1	140.0	120.0	140.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
B-5	140.0	54.0	140.0	9	10.2	6	7.4	7.4	5.9	5.9	5.1	5.2	7.2	2.5	7.0
Field Blank	-	-	-	<5.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	<1.0

NOTES:

ug/L = Micrograms per liter
 BGS = Below ground surface
^{CS} Costal Plain & Saprolite
^{CP} Coastal Plain/Perched Well
 / = Duplicate samples
 TCE = Trichloroethene
 NC = Not collected
 NA = Not available

NR = Not required for this sampling event
 NS = Not sampled unable to retrieve passive bag sampler
 NSD = Not sampled due to insufficient volume of water in well
 < = result is less than or not detected at this limit of quantitation
 MW-12, MW-13, 2TP-10, and 2TP-11 added to semi-annual sampling in June 2011
 Starting in November 2009 samples analyzed using EPA Method 8260
 * Well on biennial sampling frequency
 Table presents concentrations from May 2008 to the present
 ** Well on annual sampling frequency per October 29, 2018 EPA approval.

ATTACHMENT 2

To Semi-Annual Project Progress Report
RCRA Corrective Action Permit
No. MDD046279311

General Electric Co.
Former Appliance Park East Facility
Columbia, MD

Period July 1, 2019 to December 31, 2019

**Findings Summary for Warehouse Building Oil/Water Separator and
Acid Neutralization Units RFI Unit 6**

FIGURE 1
GROUNDWATER ELEVATION CONTOUR MAP
NOVEMBER 17, 2017
RFI UNIT #6
GE - FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND

LEGEND

- +++++ RAILROAD
- MONITORING WELL
- ⊙ TEMPORARY PIEZOMETER (REMOVED)
- 336.46 GROUNDWATER ELEVATION (FT. MSL)
- 337 — GROUNDWATER ELEVATION CONTOUR (FEET)
(DASHED WHERE INFERRED)
- ➔ GROUNDWATER FLOW DIRECTION

NOTE:

COULD NOT LOCATE OBG-67 AND OBG-68.

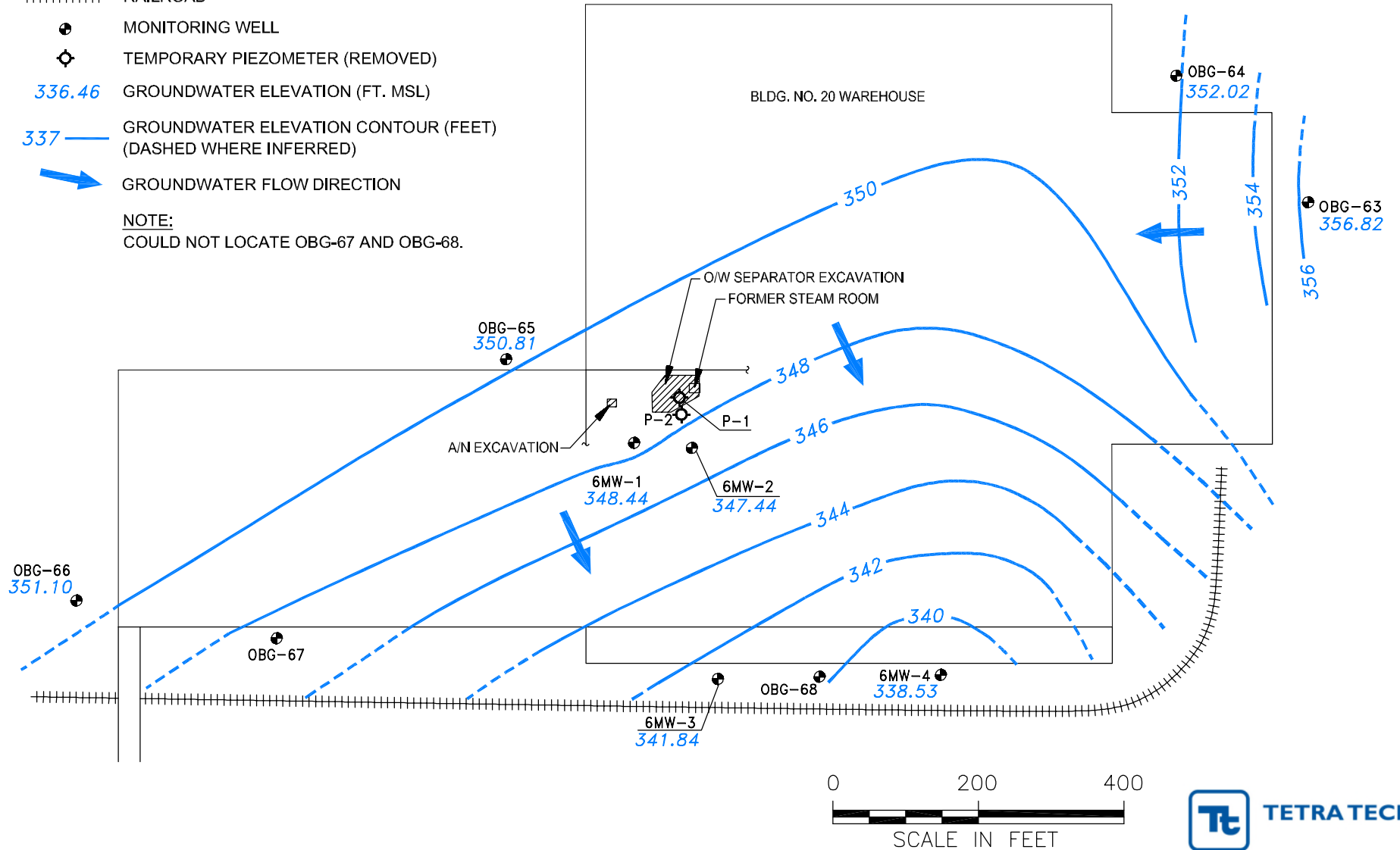


Table 1 Summary of Ground Water Elevations
RFI Unit 6
Former Appliance Park East, Columbia, Maryland

Date		17-Oct-94*		17-Jan-95*		18-Apr-95*		18-Jul-95*		16-May-02		14-Nov-07		29-Nov-12		17-Nov-17	
Well ID	Reference Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL
6MW-1	359.70	10.99	348.71	11.41	348.29	11.37	348.33	11.05	348.65	12.69	347.01	12.08	347.62	11.53	348.17	11.26	348.44
6MW-2	359.49	11.58	347.91	12.04	347.45	11.93	347.56	11.55	347.94	13.42	346.07	12.68	346.81	12.30	347.19	12.05	347.44
6MW-3	355.21	11.91	343.30	12.00	343.21	12.17	343.04	11.77	343.44	17.14	338.07	14.76	340.45	13.84	341.37	13.37	341.84
6MW-4	355.17	10.81	344.36	10.52	344.65	NM	--	10.59	344.58	15.83	339.34	16.55	338.62	16.86	338.31	16.64	338.53
OBG-63	361.58	9.61	351.97	8.33	353.25	9.22	352.36	9.35	352.23	5.60	355.98	5.61	355.97	4.86	356.72	4.76	356.82
OBG-64	362.40	11.33	351.07	10.52	351.88	11.01	351.39	11.00	351.40	11.51	350.89	11.99	350.41	11.35	351.05	10.38	352.02
OBG-65	362.61	11.97	350.64	11.83	350.78	12.30	350.31	12.12	350.49	13.33	349.28	13.41	349.20	12.50	350.11	11.80	350.81
OBG-66	361.99	11.81	350.18	12.57	349.42	12.42	349.57	11.95	350.04	13.54	348.45	13.37	348.62	11.59	350.40	10.89	351.10
OBG-67	355.05	5.44	349.61	5.55	349.50	5.38	349.67	4.36	350.69	6.69	348.36	NM	--	NM	--	NM	--
OBG-68	355.54	12.05	343.49	12.27	343.27	12.50	343.04	11.93	343.61	NM	--	NM	--	NM	--	NM	--

Notes:

* - Data presented in *Addendum to the RCRA Facility Investigation Report for RFI Unit 6*, dated 2 August 1995

Reference elevation for all wells is top of PVC casing

MSL - Mean Sea Level

NM - Not measured, well was inaccessible

Table 2 Detected Analytes for Ground Water Samples
RFI Unit 6
Former Appliance Park East, Columbia, Maryland

Sample Number			6-MW-1					6-MW-2					6-MW-3					OBG-65				
Sample Collection Date			8/22/94*	05/16/02	11/14/07	11/29/12	11/17/17	8/23/94*	05/16/02	11/14/07	11/29/12	11/17/17	8/23/94*	05/16/02	11/14/07	11/29/12	11/17/17	8/22/94*	05/16/02	11/14/07	11/29/12	11/17/17
Analyte	HBN	PQL																				
Field Parameters																						
pH (standard units)	--	--	6.9	6.4	5.9	6.3	6.4	6.3	6.2	6.7	6.0	6.1	6	6.6	6.8	6.7	6.8	6.2	6.4	6.2	6.0	6.0
Conductivity (mS/cm)	--	--	NA	0.169	0.238	0.116	0.147	NA	0.203	0.660	0.079	0.083	NA	0.771	0.616	0.298	0.321	NA	0.213	0.315	0.090	0.120
Temperature (°C)	--	--	NA	19.8	17.4	19.1	20.0	NA	19.7	16.5	19.5	19.9	NA	16.7	16.6	17.7	17.8	NA	15.9	15.7	16.1	15.1
D.O. (mg/L)	--	--	NA	2.83	NA	NA	NA	NA	0.84	NA	NA	NA	NA	2.21	NA	NA	NA	NA	4.63	NA	NA	NA
Permit List 4 Volatiles (µg/L)																						
1,1-Dichloroethene	7	5	--	< 5	< 5	< 5	< 1	--	30	56	85	99.2	--	< 5	< 5	< 5	< 1	--	< 5	< 5	< 5	< 1
cis-1,2-Dichloroethene	--	5	NA	< 5	< 5	< 5	< 1	NA	82	89	97	65.6	NA	< 5	< 5	< 5	< 1	NA	< 5	< 5	< 5	< 1
1,2-Dichloroethene (total)	100	5	--	NA	NA	NA	NA	11	NA	NA	NA	NA	--	NA	NA	NA	NA	--	NA	NA	NA	NA
Trichloroethene	5	5	--	< 5	< 5	< 5	< 1	24	110	130	170	170	--	< 5	< 5	< 5	< 1	--	< 5	< 5	< 5	< 1
Benzene	5	5	--	< 5	< 5	< 5	< 1	2 J	< 5	< 5	< 5	< 1	--	< 5	< 5	< 5	< 1	--	< 5	< 5	< 5	< 1
Tetrachloroethene	5	5	--	< 5	< 5	< 5	< 1	--	6	18	44	75.9	--	< 5	< 5	< 5	< 1	--	< 5	< 5	< 5	< 1
Inorganic Parameters (µg/L)																						
Antimony	10	30	--	< 5	NA	NA	NA	--	< 5	NA	NA	NA	--	< 5	NA	NA	NA	--	< 5	NA	NA	NA
Chromium	100	10	2.2 J	< 3	NA	NA	NA	0.44 J	< 3	NA	NA	NA	--	< 3	NA	NA	NA	--	< 3	NA	NA	NA

Notes:

mg/L - milligrams per liter

µg/L - micrograms per liter

HBN - Health Based Number

PQL - Practical Quantitation Limit

* - Data presented in *RCRA Facility Investigation Report for RFI Unit 6*, dated 3 March 1995

< 5 or < 1 - Analyte not detected, value indicates detection limit

-- - Not detected.

NA - Not analyzed

J - Analyte present, result may not be accurate or precise

B - Not detected substantially above the level reported in laboratory or field blanks

d - Sample is a duplicate of 6-MW-2

Table 2 (cont.) Detected Analytes for Ground Water Samples
RFI Unit 6
Former Appliance Park East, Columbia, Maryland

Sample Number			6-MW-4		OBG-67	OBG-68	6-MW-100 ^d	6-MW-20 ^d	6-MW-5 ^d			6-FB-1		6-EB-1		6-TB-1		TB-1		
Sample Collection Date			8/23/94*	05/16/02	8/23/94*	8/23/94*	8/23/94*	05/16/02	11/14/07	11/29/12	11/17/17	8/22/94*	05/16/02	8/22/94*	05/16/02	8/23/94*	05/16/02	11/14/07	11/29/12	11/17/17
Analyte	HBN	PQL																		
Field Parameters																				
pH (standard units)	--	--	5.4	6.2	6.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Conductivity (mS/cm)	--	--	NA	0.908	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Temperature (°C)	--	--	NA	16.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D.O. (mg/L)	--	--	NA	4.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Permit List 4 Volatiles (µg/L)																				
1,1-Dichloroethene	7	5	--	< 5	--	--	--	30	57	84	98.6	--	< 5	--	< 5	--	< 5	< 5	< 5	< 1
cis-1,2-Dichloroethene	--	5	NA	< 5	NA	NA	NA	83	95	96	66.1	NA	< 5	NA	< 5	NA	< 5	< 5	< 5	< 1
1,2-Dichloroethene (total)	100	5	--	NA	--	--	10	NA	NA	NA	NA	--	NA	--	NA	--	NA	NA	NA	NA
Trichloroethene	5	5	--	< 5	--	--	23	110	130	170	170	--	< 5	--	< 5	--	< 5	< 5	< 5	< 1
Benzene	5	5	--	< 5	--	--	2	J	< 5	< 5	< 1	--	< 5	--	< 5	--	< 5	< 5	< 5	< 1
Tetrachloroethene	5	5	--	< 5	--	--	--	6	17	45	75.2	--	< 5	--	< 5	--	< 5	< 5	< 5	< 1
Inorganic Parameters (µg/L)																				
Antimony	10	30	--	< 5	2.3	--	--	< 5	NA	NA	NA	--	< 5	--	< 5	--	< 5	NA	NA	NA
Chromium	100	10	2	J	< 3	7.9	3.8	B	< 3	NA	NA	1	< 3	--	< 3	--	< 3	NA	NA	NA

Notes:

mg/L - milligrams per liter

µg/L - micrograms per liter

HBN - Health Based Number

PQL - Practical Quantitation Limit

* - Data presented in RCRA Facility Investigation Report for RFI Unit 6, dated 3 March 1995

< 5 or < 1- Analyte not detected, value indicates detection limit

-- - Not detected, detection limit not available

NA - Not analyzed

J - Analyte present, result may not be accurate or precise

B - Not detected substantially above the level reported in laboratory or field blanks

d - Sample is a duplicate of 6-MW-2

ATTACHMENT 3

To Semi-Annual Project Progress Report
RCRA Corrective Action Permit
No. MDD046279311

General Electric Co.
Former Appliance Park East Facility
Columbia, MD

Period July 1, 2019 to December 31, 2019

Annual Institutional Control Monitoring Report



January 21, 2020

John Hopkins
Remedial Project Manager
Land and Chemicals Division
USEPA Region III
1650 Arch Street (3LC10)
Philadelphia, PA 19103

**RE: Annual Institutional Controls Monitoring Report
RCRA Corrective Action Permit MDD046279311
Former Appliance Park East Facility, Columbia, MD**

Dear Mr. Hopkins:

On behalf of the General Electric Company (GE), this letter presents the annual institutional controls monitoring report for the above-referenced facility. In 2016, an environmental covenant was executed and recorded for Parcel A-8; this report is being submitted in accordance with Part II.B.3 of RCRA Corrective Action Permit MDD04627931 (Permit) and associated *Institutional Control Plan, Former Appliance Park East, Columbia, Maryland* (IC Plan) dated January 24, 2013 and approved in United States Environmental Protection Agency (EPA) letter dated February 5, 2013. GE is in communication with EPA regarding the ECs for parcels A-10 and A-15. The attached **Figure 1** shows the location of the referenced parcels and areas covered in the IC Plan are shown in.

Monitoring of the institutional controls was conducted by review of governmental controls specified in the IC Plan and windshield survey. The details are as follows.

Governmental Controls

1. Reviewed Howard County zoning ordinances and verified that they remain in place; the subject parcels are zoned M-1 (light manufacturing) as shown on the attached zoning map (see map grid #42).
2. Reviewed Howard County water supply ordinance and verified that the requirement to connect to municipal water remains in effect; see attached ordinance copy and following link:
https://library.municode.com/md/howard_county/codes/code_of_ordinances?nodeId=HOCOCO_TIT3B_U_SUBTITLE_9INPOWASUSY_S3.908COPUWASYRE. The public water supply map on the following Howard County Public Works website confirms that the subject areas are connected to the municipal water system: <https://www.howardcountymd.gov/Departments/Public-Works/Bureau-Of-Utilities/Customer-Service-Division/Howard-County-Public-Water-Supply-Sources>
3. Searched the Maryland Department of Environment (MDE) Permit Application Database and verified that permits were not issued for new ground water supply wells within the areas subject to this IC Plan; as you will see in the attached MDE database search results the only permit applications for the subject areas found are the APE water appropriation permit application from 2011, the APE NPDES permit renewal application submitted in 2017, and APE Controlled Hazardous Substances permit renewal application submitted in 2018. The MDE Permit Application Database available at:
<https://mde.maryland.gov/programs/Permits/Pages/SB47.aspx>

Windshield Survey

A windshield survey/site visit was conducted on January 11, 2020 to observe any potential non-compliance with the governmental controls. Non-compliance was not observed. A copy of the inspection checklist completed during the windshield survey is attached.

In summary, the windshield survey observations and review of the referenced governmental controls confirm compliance with the IC Plan.

Please contact me at 410-990-4607 or belssi.changlee@tetrattech.com if you require additional information or have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Belssi Chang Lee", with a stylized flourish at the end.

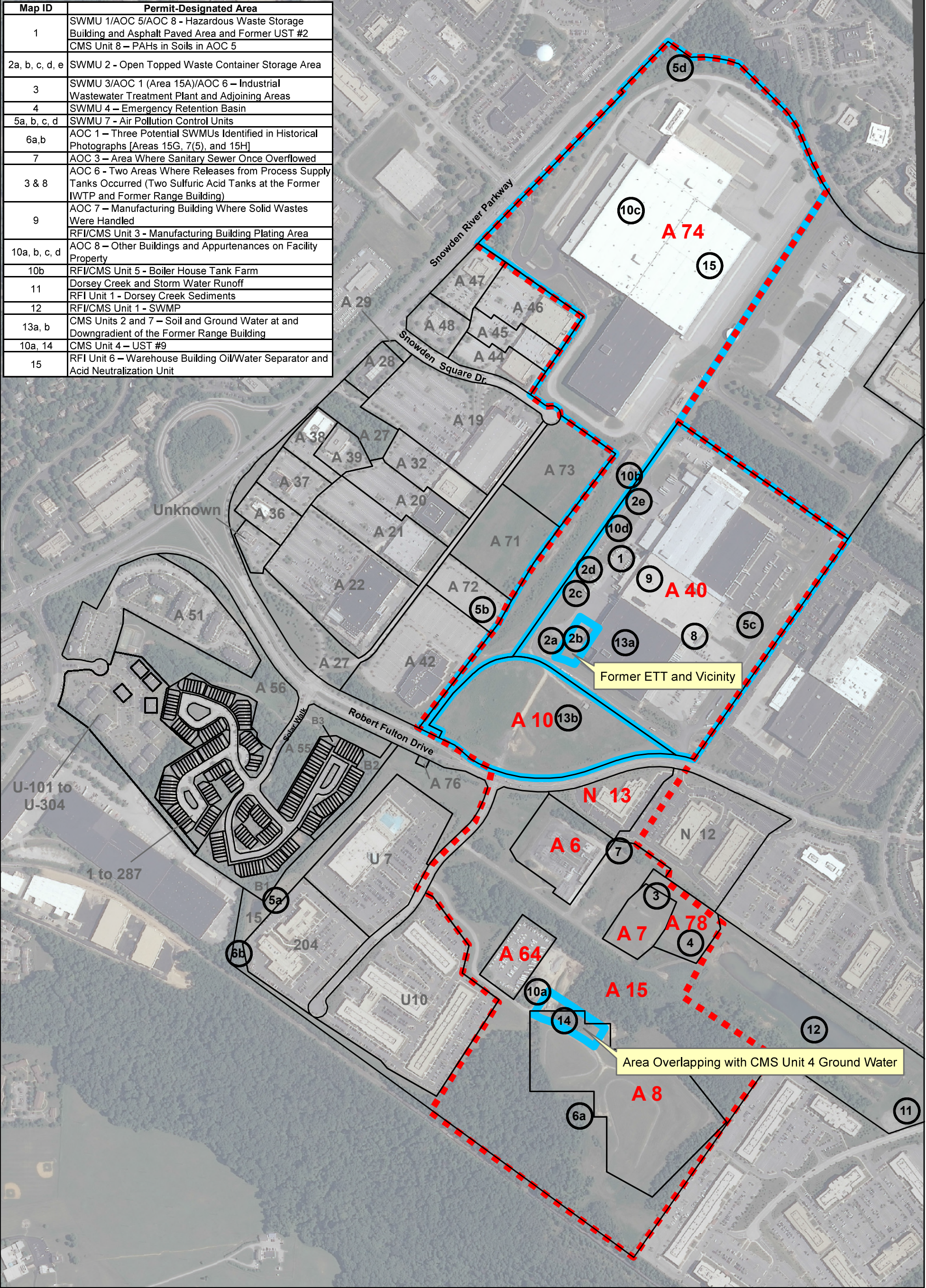
Belssi Chang Lee
Project Manager

Attachments

Cc: K. Mooney, GE

ATTACHMENTS

Map ID	Permit-Designated Area
1	SWMU 1/AOC 5/AOC 8 - Hazardous Waste Storage Building and Asphalt Paved Area and Former UST #2 CMS Unit 8 – PAHs in Soils in AOC 5
2a, b, c, d, e	SWMU 2 - Open Topped Waste Container Storage Area
3	SWMU 3/AOC 1 (Area 15A)/AOC 6 – Industrial Wastewater Treatment Plant and Adjoining Areas
4	SWMU 4 – Emergency Retention Basin
5a, b, c, d	SWMU 7 - Air Pollution Control Units
6a,b	AOC 1 – Three Potential SWMUs Identified in Historical Photographs [Areas 15G, 7(5), and 15H]
7	AOC 3 – Area Where Sanitary Sewer Once Overflowed
3 & 8	AOC 6 - Two Areas Where Releases from Process Supply Tanks Occurred (Two Sulfuric Acid Tanks at the Former IWTP and Former Range Building)
9	AOC 7 – Manufacturing Building Where Solid Wastes Were Handled RFI/CMS Unit 3 - Manufacturing Building Plating Area
10a, b, c, d	AOC 8 – Other Buildings and Appurtenances on Facility Property
10b	RFI/CMS Unit 5 - Boiler House Tank Farm
11	Dorsey Creek and Storm Water Runoff
12	RFI Unit 1 - Dorsey Creek Sediments
13a, b	CMS Units 2 and 7 – Soil and Ground Water at and Downgradient of the Former Range Building
10a, 14	CMS Unit 4 – UST #9
15	RFI Unit 6 – Warehouse Building Oil/Water Separator and Acid Neutralization Unit



Note: A 7 & A 8 are Subject to Maryland Controlled Hazardous Substance Permit No. A-011

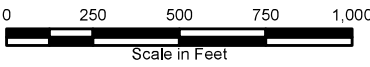
2011 Parcels from Howard County

RCRA Permit Boundary

Parcels Subject to Environmental Covenants (Parcels A10 & A40 and portions of Parcels A74, A8 & A15)

Figure 1
Site Map
Former Appliance Park East Facility
Columbia, Maryland

1 Approximate Location of VI, RFI, or CMS Study Area



Sec. 3.908. - Connection to public water system required.

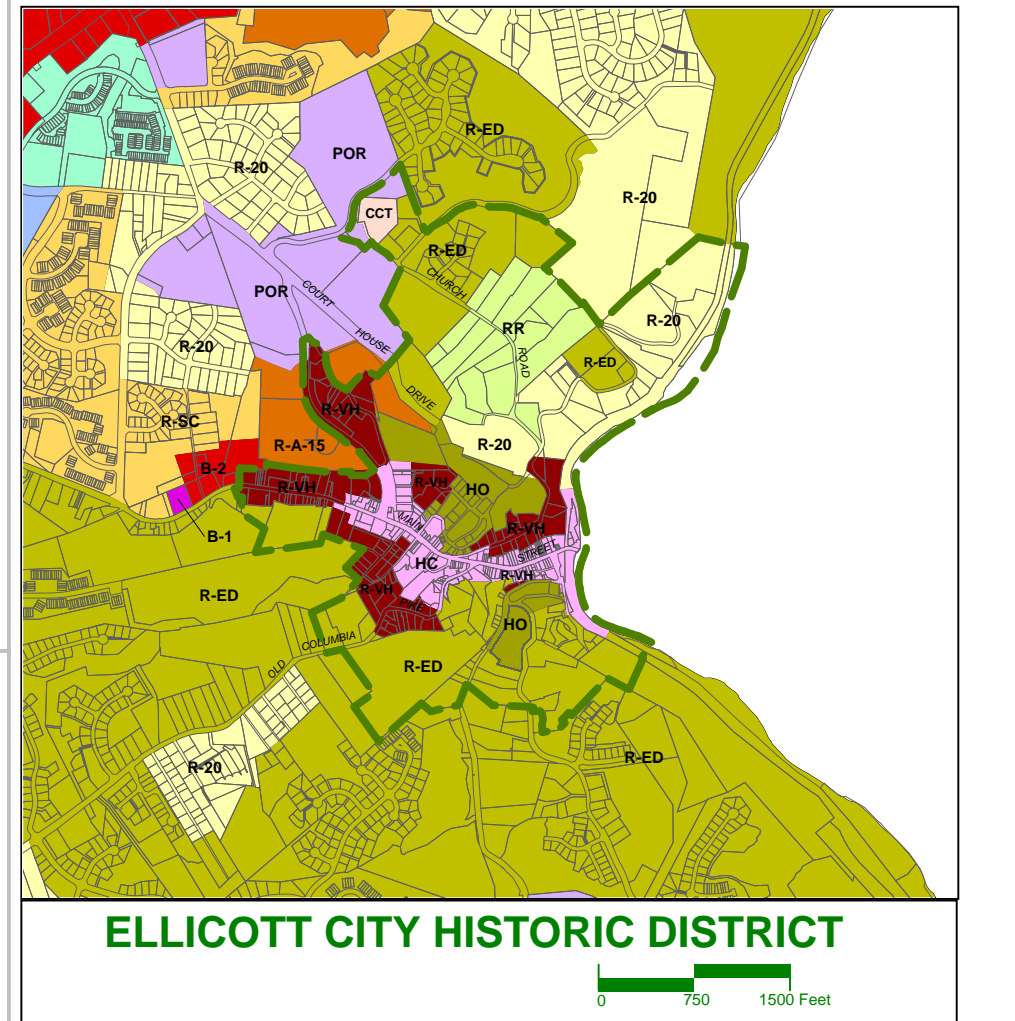
- (a) *Public Water Connection.* Except for property located outside the planned service area for water service and the Metropolitan District, wherever a water main for public use exists in any street or alley and directly abuts the property, the owner of all buildings constructed for human habitation, occupancy, or use shall connect to the public water main.
- (b) *Wells Prohibited.* A well for potable use shall not be constructed on a property accessible to an adequate public water supply.

(Ord. No. 81, 2006, § 1)

Howard County

M A R Y L A N D

Zoning Map



ELLICOTT CITY HISTORIC DISTRICT

Lawyer's Hill Historic District Boundary

LIMIT OF 2014 CERTIFIED AIRPORT NOISE ZONE

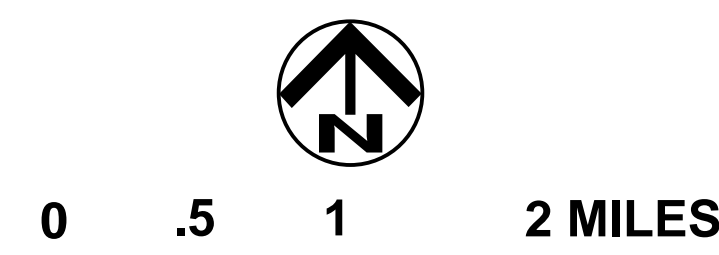
Legend

- RC-DEO Rural Conservation Density Exchange Option
- RR-DEO Rural Residential Density Exchange Option
- R-ED Residential: Environmental Development
- R-20 Residential: Single (20,000 Square Feet)
- R-12 Residential: Single (12,000 Square Feet)
- RSI Residential: Senior-Institutional
- R-SC Residential: Single Cluster
- R-SC-1 Residential: Single Cluster-Institutional Overlay
- CEF-R Community Enhancement Floating-Residential
- R-SA-R Residential: Single Attached
- R-SA-1 Residential: Single Attached-Institutional Overlay
- R-VH Residential: Village Housing
- R-A-15 Residential: Apartments
- R-A-17 Residential: Apartments
- R-MH Residential: Mobile Home
- R-HO Residential: Historic - Environmental
- HO Historic: Office
- HC Historic: Commercial
- PSC Planned Senior Community
- B-1 Business: Local
- B-2 Business: General
- BR Business: Rural
- BRX Business: Rural Crossroads
- OT Office Transition
- SC Shopping Center
- POR Planned Office Research
- PEC Planned Employment Center
- NT New Town
- PGCC Planned Golf Course Community
- MIXD Mixed Use
- CEFM Community Enhancement Floating - Mixed Use
- TOD Transit Oriented Development
- CCT Community Center Transition
- CAC-CLU Corridor Activity Center-Continuing Light Industrial Overlay
- CE-CLU Corridor Employment-Continuing Light Industrial Overlay
- M-1 Manufacturing: Light
- M-2 Manufacturing: Heavy
- SW Solid Waste Overlay
- TNC Traditional Neighborhood Center Overlay
- CR Commercial Redevelopment Overlay

This map provides a general overview of the Howard County Zoning Plan adopted by the Howard County Council. For parcel specific zoning information refer to the 600' scale Official Sectional Zoning Maps.

Zoning effective October 6, 2013.
Prepared by the Howard County Department of Planning and Zoning.

600' scale Sectional Map grid



Revisions					
ZB #	Date	Description	Map #	ZB #	Date
110001	11/01/01	Initial Zoning Map	1		
110002	01/01/02	PEC to CEF-M	2		
110003	11/10/05	R-ED to CEF-M	3		
110004	11/01/07	RR-DEO to B-1	4		
110005	11/01/07	PEC to RR-DEO	5		
110006	11/01/07	R-20 to CEF-M	6		
110007	11/01/07	RR-DEO to B-1	7		
110008	11/01/07	RR-DEO to B-1	8		
110009	11/01/07	RR-DEO to B-1	9		
110010	11/01/07	RR-DEO to B-1	10		
110011	11/01/07	RR-DEO to B-1	11		
110012	11/01/07	RR-DEO to B-1	12		
110013	11/01/07	RR-DEO to B-1	13		
110014	11/01/07	RR-DEO to B-1	14		
110015	11/01/07	RR-DEO to B-1	15		
110016	11/01/07	RR-DEO to B-1	16		
110017	11/01/07	RR-DEO to B-1	17		
110018	11/01/07	RR-DEO to B-1	18		
110019	11/01/07	RR-DEO to B-1	19		
110020	11/01/07	RR-DEO to B-1	20		
110021	11/01/07	RR-DEO to B-1	21		
110022	11/01/07	RR-DEO to B-1	22		
110023	11/01/07	RR-DEO to B-1	23		
110024	11/01/07	RR-DEO to B-1	24		
110025	11/01/07	RR-DEO to B-1	25		
110026	11/01/07	RR-DEO to B-1	26		
110027	11/01/07	RR-DEO to B-1	27		
110028	11/01/07	RR-DEO to B-1	28		
110029	11/01/07	RR-DEO to B-1	29		
110030	11/01/07	RR-DEO to B-1	30		
110031	11/01/07	RR-DEO to B-1	31		
110032	11/01/07	RR-DEO to B-1	32		
110033	11/01/07	RR-DEO to B-1	33		
110034	11/01/07	RR-DEO to B-1	34		
110035	11/01/07	RR-DEO to B-1	35		
110036	11/01/07	RR-DEO to B-1	36		
110037	11/01/07	RR-DEO to B-1	37		
110038	11/01/07	RR-DEO to B-1	38		
110039	11/01/07	RR-DEO to B-1	39		
110040	11/01/07	RR-DEO to B-1	40		
110041	11/01/07	RR-DEO to B-1	41		
110042	11/01/07	RR-DEO to B-1	42		
110043	11/01/07	RR-DEO to B-1	43		
110044	11/01/07	RR-DEO to B-1	44		
110045	11/01/07	RR-DEO to B-1	45		
110046	11/01/07	RR-DEO to B-1	46		
110047	11/01/07	RR-DEO to B-1	47		
110048	11/01/07	RR-DEO to B-1	48		
110049	11/01/07	RR-DEO to B-1	49		
110050	11/01/07	RR-DEO to B-1	50		

MDE Permit Application Database Search

http://www.mde.state.md.us/programs/Permits/Pages/SB47.aspx

Accessed 01/06/2020

Name of Project	Proposed Activity	Street Address	City of Project	County	Zip Code	Applicant Name	Applicant Street Address	Applicant City	Applicant Zip Code	Type of Permit	and Applicable Statutes	MDE Contact Information	Deadline for Requesting Informational Meeting	Deadline for Requesting Public Hearing	Deadline for Requesting Contested Case Hearing	Status	Admin	Tetra Tech Comments
General Electric Co.	8700 Robert Fulton Dr.	Columbia	Howard	21046	General Electric Co.	319 Great Oaks Blvd.	Albany	12203	3.01 Surface Water Discharge Permit (Industrial) - FEDERAL: Clean Water Act; STATE: Environment Article, Title 9, Subtitle 3; COMAR 26.08.01 through 26.08.04 and COMAR 26.08.08	3.01 Surface Water Discharge Permit (Industrial); Michael Richardson, Chief, Industrial & General Permits Division, 410-537-3323, Michael.Richardson@Maryland.gov:	05/03/2012	6/7/2013	Deadline Not Scheduled	Permit Issued	Water Management Administration (WMA)	APE Water Appropriation Permit		
Former Appliance Park East Facility	Parcel A-10, 8700 Block of Robert Fulton Drive	Columbia	Howard	21046	General Electric Company	159 Plastics Avenue	Pittsfield	01201	3.01 Surface Water Discharge Permit (Industrial) - FEDERAL: Clean Water Act; STATE: Environment Article, Title 9, Subtitle 3; COMAR 26.08.01 through 26.08.04 and COMAR 26.08.08	3.01 Surface Water Discharge Permit (Industrial); Michael Richardson, Chief, Industrial & General Permits Division, 410-537-3323, Michael.Richardson@Maryland.gov	06/07/2018		N/A	Application Received	Water Management Administration (WMA)	APE NPDES Permit Renewal Application		
Former Appliance Park East	Robert Fulton Drive	Columbia	Howard	21046	General Electric Co.	1 Plastics Avenue	Pittsfield	01201	2.15 Controlled Hazardous Substances Facility Permit - FEDERAL: RCRA Subtitle C; STATE: Environment Article, Title 7, Subtitle 2; COMAR 26.13.07	2.15 Controlled Hazardous Substances Facility Permit; Ed Hammerberg, 410-537-3314, ed.hammerberg@maryland.gov	Deadline Not Scheduled	Deadline Not Scheduled	Deadline Not Scheduled	Application Received	Land Management Administration (LMA)	APE CHS Permit Renewal Application		
W.R. Grace & Co.	7500 Grace Dr.	Columbia	Howard	21044	W.R. Grace	7500 Grace Dr.	Columbia	21044	3.01 Surface Water Discharge Permit (Industrial) - FEDERAL: Clean Water Act; STATE: Environment Article, Title 9, Subtitle 3; COMAR 26.08.01 through 26.08.04 and COMAR 26.08.08	Michael Richardson, Chief, Industrial Permits Division, 410-537-3654, michael.richardson@maryland.gov	12/17/2015	Deadline Not Scheduled	Deadline Not Scheduled	Application Received	Water Management Administration (WMA)	Not in immediate vicinity of APE site		
Howard County General Hospital	5755 Cedar Lane	Columbia	Howard	21044	Howard County General Hospital	5755 Cedar Lane	Columbia	21044	1.02 Air Quality Permit to Construct - FEDERAL: Clean Air Act, Section 110 and Title V, 42 U.S.C. 7401 et seq.; STATE: Environment Article, Title 2, Subtitle 4; COMAR 26.11.02.21	1.02 Air Quality Permit to Construct; Justin Hsu, 410-537-3846, justin.hsu@maryland.gov, Bill Paul, 410-537-3230, bill.paul@maryland.gov	Deadline Not Scheduled	Deadline Not Scheduled	Deadline Not Scheduled		Air & Radiation Management Administration (ARMA)	Not in immediate vicinity of APE site		
Walnut Creek Subdivision	8270 Old Montgomery Road	Columbia	Howard	21045	Howard County Dept. of Public Works	8270 Old Montgomery Road	Columbia	21045	3.05 Groundwater Discharge Permit (Municipal) - FEDERAL: 40 CFR Part 144; STATE: Environment Article, Title 9, Subtitle 3; COMAR 26.08.01 through 26.08.04 and 26.08.07	3.05 Groundwater Discharge Permit (Municipal); Ching-Tzone Tien, 410-537-3662, ching-tzone.tien@maryland.gov		07/10/2019	N/A	Permit Issued	Water Management Administration (WMA)	Not in immediate vicinity of APE site		
Western Regional Park	14700-15036 Carrs Mill Road	Columbia	Howard	21723	Howard County Dept. of Public Works	9250 Bendix Road	Columbia		3.05 Groundwater Discharge Permit (Municipal) - FEDERAL: 40 CFR Part 144; STATE: Environment Article, Title 9, Subtitle 3; COMAR 26.08.01 through 26.08.04 and 26.08.07	3.05 Groundwater Discharge Permit (Municipal); Ching-Tzone Tien, 410-537-3662, ching-tzone.tien@maryland.gov	April 11, 2019		N/A		Water Management Administration (WMA)	Not in immediate vicinity of APE site		

**Institutional Control Windshield Inspection
Former Appliance Park East, Columbia, MD**

Windshield Inspect. Completed by: **Belssi Chang**

Windshield Inspection Date: **11-Jan-20**

Parcel	A10	A40	A74	A8 Partial ²	A15 Partial ²
Owner	The Howard Research And Development Corporation	Gateway Owner A 40 LLC c/o RREEF Dept 207 Prop Tax	Gateway A 74 & A 76 LLC c/o RREEF Dept 207 Property Tax	General Electric Company	The Howard Research And Development Corporation GEAPE LAND HOLDINGS II INC
Address	N. Robert Fulton Drive	8700 Robert Fulton drive	8901 Snowden River Parkway	S. Snowden River Parkway	NW Samuel Morse Drive
Deed Reference	Tax Parcel 0042-0006-0513 A 10, Deed 7940/532, Plat 18973	Tax Parcel 0042-0006-0513 A 40, Deed 8878/180, Plat 12120	Tax Parcel 0042-0006-0513 A 74, Deed 8878/214, Plat 13139	Tax Parcel 0043-0001-0587 A 8, Deed 511/001, Plat 9619	Tax Parcel 0042-0012-0671 15, Deed 7940/532, Plat 18307
Institutional Control					
Residential¹ land use prohibition compliance (Yes/No & Comment)					
Single family homes, multiple family dwellings, apartment buildings	No	No	No	No	No
Dormitories, other residential-style facilities	No	No	No	No	No
Schools, day care centers, child care centers	No	No	No	No	No
Hospitals and inpatient care facilities	No	No	No	No	No
Groundwater use prohibition compliance (Yes/No & Comment)					
Observations related to groundwater wells if visible from windshield inspection	Yes - groundwater monitoring wells	Yes - groundwater monitoring wells	No	No	No
Subsurface soil excavation restriction³ compliance (Yes/No & Comment)					
Soil excavation below water table	No	No		No	No
Soil excavation below water table under building			No		
Soil excavation below perched water table at ETT ⁴		No			
Floor penetration at Press Pit ⁵		No per C. Lebak email (Jan-14-20)			

1. Residential land use defined as single family homes, multiple family dwellings, schools, day care centers, child care centers, apartment buildings, dormitories, other residential-style facilities, hospitals, and inpatient care facilities

2. Portion of Parcels A8 and A15 that overlap with the ground water impacts associated with Corrective Measures Study (CMS) Unit 4 (Underground Storage Tank [UST] #9)

3. Excavation prohibited except in conformance with a soil management plan ("SMP") reviewed and approved in advance by EPA

4. Outside of the former Range Building in the former Exterior TCE Tank (ETT) area at Parcel A40

5. Concrete floor of the western wing of the Press Pit in the former Range Building on Parcel A40